

Remarks

This Application has been carefully reviewed in light of the Office Action mailed June 5, 2006. Applicants appreciate the Examiner's consideration of the Application. Although Applicants have made clarifying amendments to Claims 1-2, 4-6, 11-14, 21, 26, and 31. At least certain of these amendments are not considered narrowing or necessary for patentability. Applicants respectfully request reconsideration and allowance of all pending claims.

I. The Claims are Allowable over the Proposed *Niehoff-Suzuki* Combination

A. The Proposed *Niehoff-Suzuki* Combination Fails to Disclose, Teach, or Suggest Each and Every Limitation Recited In Applicants' Independent Claims

The Examiner rejects Claims 1, 6-8, 11, 15-18, 21, 23-28, and 31 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,763,253 to Niehoff, et al. ("*Niehoff*") in view of U.S. Patent Application Publication 2002/0077072 by Suzuki ("*Suzuki*"). Applicants respectfully disagree and discuss independent Claims 1 and 21 as examples.

With respect to independent Claim 1, Applicants respectfully submit that the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest at least the following limitations recited in Claim 1, as amended:

- an audio interface operable to receive audible sounds and generate first and second analog signals that represent the audible sounds; and
- a coding module operable to encode a portion of the first analog signals and a portion of the second analog signals at least in part by:
 - receiving the first and second analog signals from the audio interface;
 - sampling the first analog signals at a first rate;
 - grouping at least two samples of the first analog signals to represent the portion of the first analog signals;
 - sampling the second analog signals at a second rate; and
 - grouping at least two samples of the second analog signals to represent the portion of the second analog signals, the first and second rates combining to form a rate greater than eight kilohertz such that the audible sounds represented by the portion of the first analog signals and the portion of the second analog signals are encoded at a combined rate greater than eight kilohertz.

For example, the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest “an audio interface operable to receive audible sounds and generate first and second analog signals that represent the audible sounds,” as recited in Claim 1 as amended. As allegedly disclosing the “audio interface” recited in Claim 1 (before the amendments presented in this Response), the Examiner cites “audio input 2 in figure 1” of *Niehoff*. (Office Action, Page 2) Even assuming that audio input 2 in *Niehoff* could be equated with the audio interface recited in Claim 1, *Niehoff* fails to disclose, teach, or suggest that audio input 2 is operable to “receive audible sounds and **generate first and second analog signals that represent the audible sounds**,” as recited in Claim 1. The cited portions of *Suzuki* do not appear to make up for this deficiency of *Niehoff*. Thus, the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest “an audio interface operable to receive audible sounds and generate first and second analog signals that represent the audible sounds,” as recited in Claim 1 as amended.

As another example, the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest a coding module that is operable to “encode a portion of the first analog signals and a portion of the second analog signals at least in part by . . . receiving the first and second analog signals from the audio interface,” “sampling the first analog signals at a first rate,” “grouping at least two samples of the first analog signals to represent the portion of the first analog signals,” “sampling the second analog signals at a second rate,” “grouping at least two samples of the second analog signals to represent the portion of the second analog signals, the first and second rates combining to form a rate greater than eight kilohertz such that the audible sounds represented by the portion of the first analog signals and the portion of the second analog signals are encoded at a combined rate greater than eight kilohertz,” as recited in Claim 1 as amended.¹

First, at least because the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest “an audio interface operable to receive audible sounds and generate **first and second analog signals** that represent the audible sounds,” as recited in Claim 1 as amended, the proposed *Niehoff-Suzuki* combination necessarily fails to disclose, teach, or

¹ Applicants respectfully request that if the Examiner maintains that *Niehoff* discloses at least portions of the coding module recited in Claim 1, the Examiner provide greater specificity than the entire Figure 1 and approximately three columns of *Niehoff* currently cited by the Examiner, so that Applicants can better understand and respond to the Examiner's position.

suggest a coding module that is operable to “encode a portion of *the first analog signals* and a portion of *the second analog signals*,” “receiv[e] the *first and second analog signals from the audio interface*,” “sampl[e] the *first analog signals* at a first rate,” and “sampl[e] the *second analog signals* at a second rate,” as recited in Claim 1 as amended.

Second, even apart from the deficiencies of the proposed combination with respect to the audio interface recited in Claim 1, the proposed *Niehoff-Suzuki* combination simply fails to disclose, teach, or suggest a coding module that is operable to “receiv[e] the first and second analog signals from the audio interface,” “*sampl[e] the first analog signals at a first rate*,” and “*sampl[e] the second analog signals at a second rate*,” as recited in Claim 1 as amended. Moreover, neither *Niehoff* nor *Suzuki* appear to disclose, teach, or suggest a coding module that is operable to “*group at least two samples of the first analog signals* to represent [a] portion of the first analog signals,” “*group at least two samples of the second analog signals* to represent [a] portion of the second analog signals,” as recited in Claim 1 as amended.

Third, the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest the coding module wherein “the first and second rates combin[e] to form a rate greater than eight kilohertz such that the audible sounds represented by the portion of the first analog signals and the portion of the second analog signals are encoded at a combined rate greater than eight kilohertz,” as recited in Claim 1 as amended. As allegedly teaching “a rate greater than eight kilohertz,” the Examiner relies on *Suzuki*. (Office Action, Page 3) The Examiner seems to cite each portion of *Suzuki* that simply mentions a frequency of eight kilohertz or greater, without regard for the context of the mention of that frequency. (See, e.g., Office Action, Page 3 citing *Suzuki*, Abstract, Figures 1-5, Paragraphs 0011, 0030-0038, 0040-0045, 0050, 0053-0054) Indeed the Examiner’s rejection simply states that “*Suzuki* also teaches a radio transmitter and receiver for a Bluetooth system . . . wherein three SCO links are used whereby frequencies greater than eight kilohertz are *used*.” (Office Action, Page 3) (emphasis added) Even assuming *Suzuki* discloses merely *using* frequencies greater than eight kilohertz for some portion of the signal processing in its system, *Suzuki* fails to disclose, teach, or suggest “the first and second rates combin[e] to form a rate greater than eight kilohertz such that the audible sounds represented by the portion of the first analog signals [determined in

the manner recited in Claim 1] and the portion of the second analog signals [determined in the manner recited in Claim 1] are encoded at a combined rate greater than eight kilohertz," as recited in Claim 1 as amended.

Thus, the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest the coding module operable to encode a portion of the first analog signals and a portion of the second analog signals in the manner recited in Claim 1.

For at least these reasons, Applicants respectfully submit that the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest each and every limitation recited in independent Claim 1 and its dependent claims. For at least certain analogous reasons, Applicants respectfully submit that the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest each and every limitation recited in independent Claims 11 and 31 and their dependent claims.

With respect to independent Claim 21, Applicants respectfully submit that the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest each and every limitation recited in Claim 21 as amended.

For example, for at least certain reasons analogous to those discussed above with reference to Claim 1, the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest a wireless module that is operable to receive encoded portions of audible sounds over a first synchronous channel and encoded portions of the audible sounds over a second synchronous channel, ***the encoded portions of the audible sounds having been encoded in the manner recited in Claim 21.***

For at least these reasons, Applicants respectfully submit that the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest each and every limitation recited in independent Claim 21 and its dependent claims. For at least certain analogous reasons, Applicants respectfully submit that the proposed *Niehoff-Suzuki* combination fails to disclose, teach, or suggest each and every limitation recited in independent Claims 26 and its dependent claims.

B. The Proposed *Niehoff-Suzuki* Combination is Improper

Applicants respectfully submit that the Examiner has not provided the requisite teaching, suggestion, or motivation, either in *Niehoff*, *Suzuki*, or in the knowledge generally available to one of ordinary skill in the art at the time of Applicants' invention to combine *Niehoff* with *Suzuki* in the manner the Examiner proposes.

The governing Federal Circuit case law makes this strict legal standard clear.² According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine or modify prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343, 61 U.S.P.Q.2d 1430, 1433 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 U.S.P.Q.2d 1456, 1459 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d at 682, 16 U.S.P.Q.2d at 1432. *See also In re Rouffet*, 149 F.3d 1350, 1357, 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998) (holding a prima facie case of obviousness not made where the combination of the references taught every element of the claimed invention but did not provide a motivation to combine); *In Re Jones*, 958 F.2d 347, 351, 21 U.S.P.Q.2d 1941, 1944 (Fed. Cir. 1992) ("Conspicuously missing from this record is any evidence, other than the PTO's speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at" the claimed invention.). Even a determination that it would have been obvious to one of ordinary skill in the art at the time of the invention to try the proposed modification or

² Note M.P.E.P. 2145 X.C. ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

combination is not sufficient to establish a *prima facie* case of obviousness. *See In re Fine*, 837 F.2d 1071, 1075, 5 U.S.P.Q.2d 1596, 1599 (Fed. Cir. 1988).

In addition, the M.P.E.P. and the Federal Circuit repeatedly warn against using an applicant's disclosure as a blueprint to reconstruct the claimed invention. For example, the M.P.E.P. states, "The tendency to resort to 'hindsight' based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art." M.P.E.P. § 2142. The governing Federal Circuit cases are equally clear. "A critical step in analyzing the patentability of claims pursuant to [35 U.S.C. § 103] is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. . . . Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the invention taught is used against its teacher.'" *In re Kotzab*, 217 F.3d 1365, 1369, 55 U.S.P.Q.2d 1313, 1316 (Fed. Cir. 2000) (citations omitted). In *In re Kotzab*, the court noted that to prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. *See id.* *See also, e.g., Grain Processing Corp. v. American Maize-Products*, 840 F.2d 902, 907, 5 U.S.P.Q.2d 1788, 1792 (Fed. Cir. 1988). Similarly, in *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board, explaining that the required evidence of such a teaching, suggestion, or motivation is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999, 50 U.S.P.Q.2d at 1617 (citations omitted).

The Examiner states:

Suzuki also teaches a radio transmitter and receiver for a Bluetooth system (title, abstract) wherein three SCO links are used whereby frequencies greater than eight kilohertz are used (abstract, figures 1-5, paragraphs 0011, 0030-0038, 0040-0045, 0050, 0053-0054) so as to improve tonal characteristics of wireless units speakers (paragraph 0012).

It would have been obvious for any one of ordinary skill in the art at the time of invention to utilize the teachings of Suzuki into the teachings of Niehoff in order to improve audio quality of speakers because frequencies from 0 to 4 kHz cannot provide sufficient audio quality at all times.

(Office Action, Page 3)

It appears that the Examiner has merely proposed an alleged advantage of combining *Niehoff* with *Suzuki* (an advantage which Applicants do not admit could even be achieved by combining *Niehoff* with *Suzuki* in the manner the Examiner proposes). The alleged advantage cited by the Examiner does not provide an explanation as to: (1) why it would have been obvious to one of ordinary skill in the art at the time of Applicants' invention to modify the particular techniques disclosed in *Niehoff* to include the alleged teachings of *Suzuki*; and (2) how one of ordinary skill in the art at the time of Applicants' invention would have made such a modification to *Niehoff*. Indeed, it does not even appear that there would be any reason for making such a modification in the system of *Niehoff* based solely on the teachings of the references. There is certainly no reason to assume that one of ordinary skill in the art at the time of Applicants' invention would have been motivated to combine the teachings of *Suzuki* with the teachings of *Niehoff* as the Examiner proposes.

Therefore, for at least these reasons, it certainly would not have been obvious to one of ordinary skill in the art at the time of invention *to even attempt* to, let alone *to actually*, combine the particular system disclosed in *Niehoff* with the particular teachings of *Suzuki* in the manner proposed by the Examiner.³ Applicants respectfully submit that the Examiner's

³ If "common knowledge" or "well known" art is relied upon by the Examiner to combine or modify *Niehoff* with *Suzuki*, Applicants respectfully request that the Examiner provide a reference pursuant to M.P.E.P. § 2144.03 to support such an argument. If the Examiner relies on personal knowledge to supply the required motivation or suggestion to combine or modify *Niehoff* with *Suzuki*, Applicants respectfully request that the Examiner provide an affidavit supporting such facts pursuant to M.P.E.P. § 2144.03.

attempt to combine *Niehoff* with *Suzuki* appears to constitute the type of impermissible hindsight reconstruction of Applicants' claims, using Applicants' claims as a blueprint, that is specifically prohibited by the M.P.E.P. and governing Federal Circuit cases.

Accordingly, since the Examiner has not provided the required teaching, suggestion, or motivation to combine *Niehoff* with *Suzuki* in the manner the Examiner proposes, Applicants respectfully submit that the Examiner's conclusions set forth in the Office Action do not meet the requirements set forth in the M.P.E.P. and the governing Federal Circuit case law for demonstrating a *prima facie* case of obviousness. Applicants respectfully submit that the rejection must therefore be withdrawn.

C. Conclusion

For at least these reasons, Applicants respectfully request reconsideration and allowance of independent Claims 1, 11, 21, 26, and 31 and their dependent claims.

II. The Rejected Dependent Claims are Allowable

Claims 2-3 and 12 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Niehoff* and *Suzuki* in view of U.S. Patent 4,378,603 to Eastmond ("*Eastmond*"). Claims 4-5, 9-10, 13-14, 19-20, 22, and 29-30 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Niehoff* and *Suzuki* in view of U.S. Patent Application Publication 2003/0098806 by Green ("*Green*").

Dependent Claims 2-5, Claims 12-14 and 19-20, Claim 22, and Claims 29-30 dependent from independent Claims 1, 11, 21, and 26, respectively, which Applicants have shown above to be clearly allowable over the Examiner's proposed *Niehoff-Suzuki* combination. It does not appear that the cited portions of either *Eastmond* or *Green* make up for these deficiencies of the proposed *Niehoff-Suzuki* combination. Thus, dependent Claims 2-5, 12-14, 19-20, 22, and 29-30 are allowable at least because of they depend from allowable independent claims. Additionally, dependent Claims 2-5, 12-14, 19-20, 22, and 29-30 recite further patentable distinctions over the references cited by the Examiner. To avoid burdening the record and in view of the clear allowability of independent Claims 1, 11, 21, and 26, Applicants do not specifically discuss these distinctions in this Response.

However, Applicants reserve the right to discuss these distinctions in a future Response or on Appeal, if appropriate. Additionally, Applicants do not admit that either the proposed *Niehoff-Suzuki-Eastmond* combination or the proposed *Niehoff-Suzuki-Green* combination is even possible or that the Examiner has shown the requisite teaching, suggestion, or motivation in the cited references or in the knowledge generally available to one of ordinary skill in the art at the time of invention to combine or modify these references in the manner the Examiner proposes.

For at least these reasons, Applicants respectfully request reconsideration and allowance of dependent Claims 2-5, 12-14, 19-20, 22, and 29-30.

III. No Waiver

All of Applicants' arguments and amendments are without prejudice or disclaimer. Additionally, Applicants have merely discussed example distinctions from the references cited by the Examiner. Other distinctions may exist, and Applicants reserve the right to discuss these additional distinctions in a later Response or on Appeal, if appropriate. By not responding to additional statements made by the Examiner, Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are sufficient to overcome the Examiner's rejections.

Conclusion

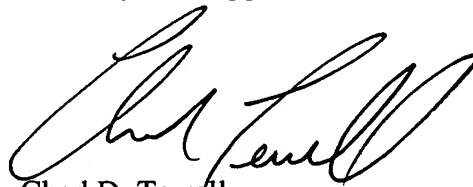
Applicants have made an earnest attempt to place this case in condition for allowance. For at least the foregoing reasons, Applicants respectfully request full allowance of all pending claims.

If the Examiner feels that prosecution of the present Application may be advanced in any way by a telephone conference, the Examiner is invited to contact the undersigned attorney at 214.953.6813.

The Commissioner is hereby authorized to charge the amount of \$120.00 to Deposit Account No. 02-0384 of Baker Botts L.L.P. to cover the cost of a one-month extension of time. Although Applicants believe no other fees are due, the Commissioner is hereby authorized to charge any necessary additional fees or credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicants

A handwritten signature in black ink, appearing to read 'Chad D. Terrell', is written over the printed name and registration number.

Chad D. Terrell
Reg. No. 52,279

Date: October 5, 2006

Customer Number: **35005**